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FUNAI ELECTRIC CO., LTD.; FUNAI  
6 CORPORATION, INC.; P&F USA INC.; AND  
FUNAI SERVICE CORP.  
7  
8  
9

10 UNITED STATES DISTRICT COURT  
11 NORTHERN DISTRICT OF CALIFORNIA  
12

13 Funai Electric Co., Ltd.; Funai Corporation,  
14 Inc.; P&F USA, Inc.; and Funai Service  
Corporation

15 Plaintiffs,

16 v.

17 LSI Corporation, Agere Systems LLC, and  
18 Avago Technologies General IP (Singapore)  
Pte. Ltd.,

19 Defendants.  
20

Case No. 5:16-cv-1210

**PLAINTIFFS' COMPLAINT FOR  
VIOLATION OF SECTION 2 OF THE  
SHERMAN ACT, UNFAIR  
COMPETITION, BREACH OF  
CONTRACT, PROMISSORY ESTOPPEL,  
AND DECLARATORY JUDGMENT**

**DEMAND FOR JURY TRIAL**

21 Plaintiffs Funai Electric Company, Ltd. ("Funai Electric"); Funai Corporation, Inc.  
22 ("Funai Corporation"); Funai Service Corporation ("Funai Service"); and P&F USA, Inc.  
23 ("P&F") (collectively, "Funai"), by and through their undersigned counsel, hereby allege as  
24 follows in this Complaint against LSI Corporation ("LSI"), Agere Service LLC ("Agere"), and  
25 Avago Technologies General IP (Singapore) Pte. Ltd. ("Avago") (collectively, "Defendants"):

26 NATURE OF ACTION

27 1. Having failed to prevail on meritless claims at the International Trade Commission  
28 ("ITC") and having now reversed course on similarly ill-fated patent claims once pending in this

PLAINTIFFS' COMPLAINT

1 Court, Defendants cannot escape the consequences of their monopolistic and other unlawful  
2 conduct.

3 2. As part of an overall scheme to monopolize the markets for certain technologies  
4 that have become essential to products that incorporate wireless Internet connectivity capabilities  
5 and allow for the compression of videos, Defendants not only continue to breach their contractual  
6 obligations to two different Standard Setting Organizations (“SSOs”), and to third party  
7 beneficiaries such as Funai, and others, but they have filed lawsuits, which seek to enjoin parties  
8 (like Funai) from selling products that incorporate these technologies for the sole purpose of  
9 extracting exorbitant royalties that they know they are not entitled to.

10 3. Despite a judgment in this very Court finding that Defendants breached their  
11 contractual obligations to one of Funai’s chipset suppliers—the same contractual obligations  
12 owed to Funai—and even after Funai specifically requested an offer to license just the standard  
13 essential patents (“SEPs”) on fair, reasonable, and non-discriminatory (“FRAND”) terms  
14 Defendants continue to refuse to offer licenses to their claimed SEPs on FRAND terms. Instead  
15 of living up to their contractual FRAND obligations, Defendants have made a mockery of the  
16 standard setting process to exploit their unlawfully obtained and maintained monopoly in two  
17 separate relevant markets.

18 4. Accordingly, Funai is seeking to break Defendants’ unlawful monopoly  
19 stranglehold and to remedy their ongoing breaches of contractual FRAND obligations owed to  
20 Funai. In this action, Funai seeks to hold Defendants accountable for their: (a) violations of  
21 Section 2 of the Sherman Act; (b) unfair competition under California law; (c) breach of contract;  
22 and (d) promissory estoppel. Funai also seeks certain declarations and injunctive relief.

### 23 PARTIES

24 5. Plaintiff Funai Electric is a corporation organized and existing under the laws of  
25 Japan with its principal place of business at 7-7-1 Nakagaito, Daito City, Osaka 574-0013, Japan.

26 6. Plaintiff Funai Corporation is a corporation organized under the laws of New  
27 Jersey and maintains its principal place of business at 201 Route 17, Suite 903, Rutherford, New  
28 Jersey 07070.

7. Plaintiff P&F is a corporation organized under the laws of Georgia and maintains its principal place of business at 3015 Windward Plaza, Suite 100, Alpharetta, Georgia 30005.

8. Plaintiff Funai Service is a corporation organized under the laws of California and maintains its principal place of business at 2200 Spiegel Drive, Groveport, Ohio 43125.

9. On information and belief, Defendant LSI is a corporation organized and existing under the laws of Delaware, having its principal place of business at 1621 Barber Lane, Milpitas, California 95035.

10. On information and belief, Defendant Agere is a corporation organized and existing under the laws of Delaware, having its principal place of business at 1110 American Parkway NE, Allentown, Pennsylvania 18109.

11. On information and belief, Defendant Avago is a corporation with a tax registration number 2005-12430-D formed under the laws of the country of Singapore with its principal place of business at 1 Yishun Avenue 7, Singapore 768923.

#### JURISDICTION AND VENUE

12. The Court has subject matter jurisdiction over Counts I and VIII of this complaint pursuant to 28 U.S.C. §§ 1331, 1337(a), 1338(a), 1368, 2201(a) and 2202, and pursuant to Section 4 of the Sherman Act, 15 U.S.C. § 4.

13. The Court has jurisdiction over Counts II-VII of this complaint pursuant to 28 U.S.C. § 1332, because this is an action between citizens of different states and because the value of the declaratory relief sought, and the extent of the injury claimed exceed the amount of \$75,000 exclusive of interest and costs.

14. In addition to jurisdiction under 28 U.S.C. § 1332, this Court has supplemental jurisdiction over Counts II-VII pursuant to 28 U.S.C. § 1367(a) because the state and federal claims arise from a common nucleus of operative facts. As demonstrated below, Plaintiffs' claim that Defendants have violated of Section 2 of the Sherman Act, which is Count I, arises from the same set of operative facts as Plaintiffs' claims that Defendants have breached its contracts to SSOs and violated the State of California's unfair competition laws under Cal. Bus. & Prof. Code § 17200.



1           21.     The technologies that are used to allow a consumer electronics device to connect  
2 wirelessly to the Internet are described in standards adopted by a recognized SDO (standard  
3 development organization) or SSO (standard setting organization). These technologies are  
4 accepted by key industry members, in order to be commercially successful. For example, Funai  
5 could not incorporate third-party devices that connect wirelessly to the Internet, or third party  
6 products that decompress digital video streams, into its own products and be confident its  
7 customers would be able to use those devices unless those devices were compatible with  
8 standards described by an SDO.

9           22.     On the other hand, technical standardization also creates a “lock-in” effect and the  
10 risk of “patent hold-up.” Although standards are the products of coordination and compromise  
11 among competitors, certain aspects of standards may be -- and often are -- claimed by patent  
12 owners to practice their patents. Before standardization, the royalty a patentee can earn from a  
13 patent license for its technology is constrained in part by the availability of alternative technical  
14 approaches to perform that function. If a standard requires a designer to employ that patented  
15 technology, however, the patentee may demand royalties far in excess of what is warranted by the  
16 intrinsic value of the technology.

17           23.     In order to reduce the likelihood that implementers of their standards will be  
18 subject to abusive practices by patent holders, SDOs have adopted rules, policies and procedures  
19 that address the disclosure and licensing of intellectual property, such as patents or patent  
20 applications, that SDO participants may assert in relation to the practice of the standard under  
21 consideration. These rules, policies and/or procedures are set out in the intellectual property  
22 rights policies (“IPR policies”) of the SDOs.

23           24.     Many IPR policies—including those at issue in this litigation—encourage or  
24 require participants to disclose on a timely basis any IPR that they believe are sufficiently  
25 relevant to standards under consideration. These disclosures permit the SDOs and their members  
26 to evaluate technologies with full knowledge of disclosed IPR that may affect the costs of  
27 implementing the standard. The U.S. Department of Justice has reviewed the IPRs of SDOs and  
28 supported those that require the giving of licenses on FRAND terms, because such requirements

1 are procompetitive in nature and reduce the risk of patent hold ups by the holders of standards-  
2 essential patents.

3 25. Unless the patent holder specifically discloses that it is not willing to provide  
4 licenses under reasonable and non-discriminatory terms, IPR policies—including those at issue in  
5 this litigation—require participants claiming to own such “essential” patents to offer licenses for  
6 those patents to any implementer of the standard on reasonable and non-discriminatory terms and  
7 conditions. As their inclusion in the IPR policies of various standards development organizations  
8 suggests, such commitments are crucial to the standards development process.

9 26. The IPR policies of the standards development organizations enable participants in  
10 standards development to craft technology standards with the expectation that an owner of any  
11 patented technology will be prevented from demanding unfair, unreasonable, or discriminatory  
12 licensing terms and thereby be prevented from keeping parties seeking to implement the standard  
13 from doing so or imposing undue costs or burdens on parties seeking to implement the standard.  
14 Similarly, these policies allow non-members of an SDO (such as Funai) to benefit from a patent  
15 owner’s promise to license their technology on fair, reasonable and non-discriminatory terms by  
16 obtaining the surety that it will not be forced into a Hobson’s choice between a ruinous license  
17 agreement and the loss of time and money invested in developing products to comply with a  
18 given standard.

### 19 **Wireless LAN Standards**

20 27. Defendants’ unlawful licensing practices with respect to U.S. Patent Nos.  
21 6,452,958 (the ‘958 patent) and 6,707,867 (the ‘867 patent) relate to their claim that these patents  
22 are “essential” to a widely practiced standard for wireless Internet connectivity known as  
23 “WLAN,” “Wi-Fi,” and/or “802.11.”

24 28. WLAN enables an electronic device to access the Internet wirelessly at high  
25 speeds over short distances. WLAN networks typically consist of one or more access points that  
26 are connected to an Ethernet local area network, each of which communicates by radio signals  
27 with devices such as notebook computers and other electronics devices.  
28



**Defendant Agere's Involvement in Development of the 802.11 Standard**

34. The standard setting arm of IEEE, the IEEE-SA, promulgates technical standards in a variety of fields, including telecommunications. IEEE-SA had an IPR policy at the time it was drafting the 802.11 (WLAN) protocols. Under the IPR policy, when individuals participating in IEEE standards development came to believe that a company, university, or other patent holder owned patents or patent applications that might be "essential" to implement an IEEE standard under development, IEEE-SA would request Letters of Assurance from those entities. Companies and individuals who were participating in IEEE standards development were under a further obligation to affirmatively declare any owned patents or patent applications that might be "essential" to the IEEE standard which they were participating in developing.

35. When the IEEE-SA became aware of patents that might be "essential," IEEE policy was to request Letters of Assurance from the entities that owned the patent rights. The requirements for the Letters of Assurance sought by IEEE are set forth in Clause 6 of the IEEE-SA Standards Board Bylaws. Clause 6 of those Bylaws (which was revised only slightly over the years) generally provides in pertinent part:

A Letter of Assurance shall be either:

- a) A general disclaimer to the effect that the submitter without conditions will not enforce any present or future Essential Patent Claims against any person or entity making, using, selling, offering to sell, importing, distributing, or implementing a compliant implementation of the standard; or
- b) A statement that a license for a compliant implementation of the standard will be made available to an unrestricted number of applicants on a worldwide basis without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination.

36. According to IEEE's IPR policy, Letters of Assurance, once provided, are irrevocable and shall be in force at least until the standard's withdrawal.

37. If Letters of Assurance were not provided for patents asserted to be "essential" by participants, the IEEE working group either would revise the standard so that compliance could be achieved without facing any potential issues related to such patent(s), discontinue work on the



1 standard altogether, or otherwise proceed in a manner consistent with the non-disclosure and lack  
2 of Letters of Assurance so that participating and relying entities would not be exposed to  
3 discriminatory patent assertions and/or unreasonable licensing terms.

4 38. Defendants have represented to Funai that Agere owns rights in a number of  
5 patents and pending applications that it asserts are or may become “essential” to comply with  
6 one or more amendments to the 802.11 standard. These patents include the ‘958 patent and the  
7 ‘867.

8 39. Prior to the releases of the 802.11 protocols, Agere and its predecessor-in-interest  
9 Lucent submitted Letters of Assurance to the IEEE pursuant to Clause 6 of the IEEE-SA  
10 Standards Board Bylaws with respect to those protocols, guaranteeing that any “essential”  
11 patents would be licensed under reasonable and non-discriminatory terms and conditions.  
12 Agere’s and Lucent’s Letters of Assurance apply to any “essential” patents they then held as well  
13 as any other “essential” patents they subsequently obtained. Specifically, Agere’s and Lucent’s  
14 Letters of Assurance identified the ‘958 and ‘867 patents (the latter by its application number,  
15 U.S. Application No. 10/092,295) as including “one or more claims that may be required to  
16 practice” the 802.11e and 802.11g standards, and stated that Agere “is prepared to grant a license  
17 to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on  
18 reasonable terms and conditions to comply with the [Proposed] IEEE Standard.” True and  
19 correct copies of the Letters of Assurance issued by Lucent and Agere are attached hereto as  
20 Exhibit 1.

21 40. In reliance on these letters of assurance, IEEE released the 802.11 standard and  
22 amendments to that standard which Defendants assert incorporated their patented technology. On  
23 information and belief, absent the Letters of Assurance, the relevant IEEE working groups would  
24 have either revised the standards, employing alternative technologies instead, or stopped working  
25 on the protocols.

26 41. In submitting Letters of Assurance pursuant to the applicable IEEE IPR policy,  
27 Agere entered into an actual and/or implied contract with IEEE, for the benefit of IEEE members  
28 and any entity that implements the 802.11 standard. At least in exchange for having their

1 technologies incorporated into the 802.11 standard, Defendants are bound by Agere's agreements  
2 to offer licenses consistent with the referenced IEEE bylaws.

3 42. Agere and Lucent reasonably expected that their Letters of Assurance would  
4 induce implementers of the 802.11e and 802.11g standards to rely on the promises contained in  
5 the Letters of Assurance, including the promises to license identified patents on FRAND terms.

6 43. In reliance on the integrity of the IEEE's standard-setting process and the Letters  
7 of Assurance submitted in connection with the standard setting process, including the Letters of  
8 Assurance submitted by Agere and Lucent, Funai incorporated aspects of the IEEE 802.11 family  
9 of standards into its products, confident that it could obtain licenses on FRAND terms to any  
10 required patents without fear of injunction or being held up for exorbitant, non-FRAND rates.

#### 11 **Defendants' Involvement in Development of the H.264 Standard**

12 44. The ITU and ISO/IEC maintain a common patent policy, which constitutes the  
13 "code of practice" regarding patents covering subject matters of Recommendations (for the  
14 ITU) and Deliverables (for the ISO/IEC) of the respective SSOs. The objective of  
15 Recommendations and Deliverables is to ensure compatibility of technologies and systems on  
16 a worldwide basis.

17 45. Under the IPR policy in effect at the time the H.264 protocols were drafted, "[a]ny  
18 ITU Member State, Sector Member or Associate aware of a patent or pending patent application  
19 held by itself or others, which may fully or partly cover elements of the draft Recommendation(s)  
20 proposed for approval, is requested to disclose such information to the TSB, in no case later than  
21 the date scheduled for approval of the Recommendation(s) in accordance with ITU-T Patent  
22 Policy....The purpose of this form is to ensure a standardized submission to the TSB of the  
23 declarations being made by patent holders and, most importantly, to require supporting  
24 information and an explanation if the patent holder declares his/her unwillingness to license under  
25 option 1 or 2 of the licensing declaration (*i.e.*, declares option 3)."

26 46. If a patent holder indicated an unwillingness to commit to either a royalty-free or a  
27 FRAND license, "the Study Group shall then take appropriate action which shall include, but may  
28 not be limited to, a review of the draft Recommendation giving consideration to its possible

1 revision by removing the potential conflict or through further examination and clarification of the  
2 technical considerations causing the conflict.”

3 47. Defendants have represented to Funai that they own rights in a number of patents  
4 and pending applications that they assert are or may become “essential” to comply with one or  
5 more amendments to the H.264 standard. These patents include the ‘663 patent.

6 48. Defendants and/or their predecessors participated in meetings of the ITU study  
7 group which ultimately recommended H.264. In May 2002, prior to the release of the H.264  
8 standard, Avago’s predecessor company, VideoLocus, submitted a proposal to the ITU team  
9 which ultimately recommended the H.264 standard for incorporation into the standard. On  
10 information and belief, VideoLocus’ proposal to the ITU team discloses the same invention  
11 disclosed in the ‘663 patent.

12 49. Along with the proposal, VideoLocus submitted a licensing declaration entitled  
13 “JVT Patent Disclosure Form” to the ITU-T, a true and correct copy of which is attached  
14 hereto as Exhibit 2. The declaration was submitted by Mr. Lowell Winger, the named inventor  
15 of the ‘663 patent and founder of VideoLocus. In this declaration, VideoLocus chose, with  
16 respect to “granted, pending, or planned patents associated with the technical content of the  
17 Recommendation/Standard or Contribution,” Option 2.2, which states:

18 The Patent Holder is prepared to grant – on the basis of reciprocity for the above  
19 Recommendation/Standard – a license to an unrestricted number of applicants on a  
20 worldwide, non-discriminatory basis and on reasonable terms and conditions to  
manufacture, use and/or sell implementations of the above/Recommendation  
Standard.

21 VideoLocus further selected Option 2.2.1, which added:

22 The same as box 2.2 above, but in addition the Patent Holder is prepared to grant a  
23 “royalty-free” license to anyone on condition that all other patent holders do the  
same.

24 50. In September 2002, again prior to the release of the H.264 standard, VideoLocus  
25 submitted a licensing declaration to the ITU-T under its June 2002 guidelines. A true and  
26 correct copy of this declaration is attached hereto as Exhibit 3. VideoLocus opted for an  
27 “option 2” licensing declaration, in which VideoLocus agreed to:  
28

1 grant a license to an unrestricted number of applicants on a worldwide, non-  
2 discriminatory basis and on reasonable terms and conditions to use the patented  
3 material necessary in order to manufacture, use, and/or sell implementations of the  
above ITU-T Recommendation I ISO/IEC International Standard.

4 51. In reliance on these licensing declarations, ITU-T released the H.264 standard  
5 which Defendants assert incorporated their patented technology. On information and belief,  
6 absent the licensing declarations, the relevant ITU-T working group would have either revised the  
7 standards, employing alternative technologies instead, or stopped working on the protocols.

8 52. In submitting their licensing declarations pursuant to the applicable ITU-T IPR  
9 policy, and at least in exchange for the ITU-T's incorporation of Defendants' technology into  
10 the H.264 standard, Defendants entered into an actual and/or implied contract with ITU-T, for the  
11 benefit of ITU-T members and any entity that implements the H.264 standard, which requires  
12 Defendants at least to offer a license to the identified patents on FRAND terms. Defendants are  
13 bound by their agreements to offer licenses consistent with the referenced ITU-T bylaws.

14 53. Defendants reasonably expected that their licensing declarations would induce  
15 implementers of the H.264 standard to rely on the promises contained in the licensing  
16 declarations, including the promises to license identified patents on FRAND terms.

17 54. In reliance on the integrity of ITU-T's standard-setting process and the licensing  
18 declarations submitted in connection with the standard setting process, including the licensing  
19 declarations submitted by Defendants, Funai incorporated aspects of the H.264 standard into its  
20 products, reasonably confident that it could obtain licenses on FRAND terms to any required  
21 patents without fear of injunction or being held up for exorbitant, non-FRAND rates.

#### 22 **Defendants' Commitments to MPEG LA**

23 55. MPEG LA administers license agreements for pools of patents allegedly essential  
24 to the manufacture of products incorporating certain standards and technologies. MPEG LA  
25 currently maintains pools for a number of standards relevant to the consumer electronics industry,  
26 including one that relates to the AVC/H.264 standard.

27 56. The licensors of an MPEG LA patent pool authorize MPEG LA to grant  
28 sublicenses to third parties under their allegedly essential patents. By entering into a license

1 agreement with MPEG LA for a particular patent pool, a licensee can manufacture and sell  
2 products using any or all of the pooled patents in exchange for the payment of royalties. MPEG  
3 LA collects the royalties for the benefit of various patent holders contributing to the patent pool  
4 as licensors to MPEG LA.

5 57. In exchange for the granting of a license to an MPEG LA patent pool, licensees  
6 agree to grant reciprocal licenses under their patents that are allegedly essential to the licensed  
7 standard at the same per-patent rate that other licensors receive for their essential patents by either  
8 (a) directly granting such licenses to licensees, or (b) joining the patent pool as a licensor. The  
9 MPEG LA license is explicit that, once a patent is entered into the pool, the obligation to grant  
10 reciprocal licenses survives the withdrawal of the licensor from the patent pool.

11 58. On information and belief, Defendant LSI entered into a license agreement with  
12 MPEG LA for its patents allegedly essential to the AVC/H.264 standard, including but not  
13 limited to the '663 patent. As a licensee of the H.264 pool, LSI was contractually obligated to  
14 license its allegedly H.264-essential patents to licensors and other pool licensees at the same per-  
15 patent rate that patent pool licensors receive for their allegedly essential patents. On information  
16 and belief, LSI entered the '663 patent into the MPEG LA patent pool.

17 **Funai's Reliance on IEEE Commitments with Respect to WLAN Technologies and**  
18 **Harm to Funai Due to Defendants' Breach of Their Commitments**

19 59. Funai and other companies adopting the WLAN standard relied on Defendants'  
20 commitments to ensure that the royalties Defendants would seek would conform to the promises  
21 that they made.

22 60. In reliance on the integrity of the SDO process and the commitments made by  
23 Defendants and others regarding WLAN patents they deem "essential," Funai invested  
24 substantial resources and developed, marketed and sold its products which are compatible with  
25 WLAN connectivity. Funai made its decision to develop and sell products compatible with  
26 WLAN connectivity in reliance on, and under the assumption that, it and/or any third party  
27 supplier could avoid patent litigation and take a license to any patents that Defendants, or any  
28 other company, has disclosed to the WLAN standard under IEEE's well publicized IPR policy.

1           61.     Funai and other manufacturers of WLAN-compliant products necessarily relied on  
2 the commitments of Defendants and others to disclose and license any identified patents under  
3 these terms to avoid any patent controversy even if such patents are not necessary to compliant  
4 implementations or actually practiced in any particular implementation.

5           62.     After extensive involvement in the IEEE's design of the 802.11 standard,  
6 Defendants willfully disregarded the commitments they made to IEEE and its members, affiliates  
7 and adopters, by refusing to extend to Funai a license consistent with Defendants' promises for  
8 their patents that they identified as "essential" to WLAN connectivity.

9           63.     After extensive involvement in the IEEE's design of the 802.11 standard,  
10 Defendants further willfully disregarded the commitments they made to IEEE and its members,  
11 affiliates and adopters, by refusing to extend to Funai's WiFi chip manufacturers such as Realtek  
12 a license consistent with Defendants' promises for their patents that they identified as "essential"  
13 to WLAN connectivity.

14           64.     On information and belief, after Defendant Agere's purchase by LSI, Agere  
15 manipulated its licensing position with respect to its "essential" patents. Whereas prior to LSI's  
16 purchase, Agere had agreed to licenses and cross-licenses based on the value of the component  
17 which provided WLAN connectivity, after LSI's purchase Agere would only license its "essential"  
18 802.11 patents if it received royalties based on the sales price of the end consumer product in  
19 which those components are contained – a price frequently hundreds of times greater than the  
20 component price.

21           65.     Because of, among other reasons, Defendants' policy of attempting to capture the  
22 value of the end consumer product, rather than the value of the component that provides WLAN  
23 connectivity, Defendants have offered to license their allegedly "essential" patents to Funai  
24 under only unreasonable and discriminatorily exorbitant terms. Defendants have thus  
25 unreasonably and discriminatorily targeted Funai's products for the purpose of extracting  
26 unreasonable royalties from Funai.

27           66.     Defendants at no time have offered a license to Funai for just the '958 patent or  
28 just the '867 patent and have refused to license the '958 and '867 patents to Funai unless Funai

1 also takes a license to many of Defendants' other patents as well, including patents that are  
2 irrelevant to Funai's products, or are invalid.

3 67. IEEE-SA Standards Board Bylaws state that a patentee shall not condition a  
4 license on the implementer's agreeing to take a license for any non-essential patent claims. See  
5 <https://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6>.

6 68. Defendants have refused to license the '958 and '867 patents to Funai based on the  
7 smallest salable patent practicing unit allegedly included in Funai's products.

8 69. Defendants have thereby refused to offer to license their allegedly "essential"  
9 patents at a reasonable rate, with reasonable terms, under conditions that are demonstrably free of  
10 any unfair discrimination.

11 70. Instead of offering the '958 and '867 patents to Funai on FRAND terms,  
12 Defendants filed the aforementioned ITC action and two patent infringement actions, which  
13 were pending in this Court (Case No. 12-cv-02047 and Case No. 15-cv-04307, collectively  
14 referred to hereafter at the "District Court Actions), resulting in harm to Funai.

15 71. Requiring Funai to defend the ITC action and the District Court Actions without  
16 first having been offered licenses to the '958 and '867 patents on FRAND terms, despite  
17 Defendants' promises to the contrary, is unjust. Defendants' continued refusal to offer licenses  
18 to the '958 and '867 patents on FRAND terms perpetuates injustice.

19 72. Defendants' breach of their commitments does not depend on whether any  
20 patents which Defendants have identified in relation to standards are, in fact, "essential" to  
21 practicing those standards, whether those standards can be practiced in ways that do not  
22 infringe the identified patents or whether Funai has infringed any valid Defendant patents.  
23 Because Defendants promised to license any such patents on reasonable and non-  
24 discriminatory terms, companies that rely on those commitments are entitled to avoid  
25 becoming embroiled in patent controversies and to receive the benefit of an offer of a  
26 reasonable and non-discriminatory license.

27 73. This Court already found that Defendants breached their contractual obligations  
28 to Realtek Semiconductor Corp. ("Realtek") by failing to offer Realtek a license to the '958



1 and '867 patents on FRAND terms before suing for injunctive relief in a United States District  
2 Court and in the International Trade Commission. *Realtek Semiconductor Corp. v. LSI Corp.*,  
3 946 F. Supp. 2d 998, 1008 (N.D. Cal. 2013).

4 74. A jury awarded Realtek \$3,825,000 for Defendants' breach of its contractual  
5 obligation to Realtek, which was equivalent to the reasonable attorneys' fees and costs  
6 Realtek incurred in defending itself against the lawsuit filed by Defendants in the United  
7 States International Trade Commission. *Realtek Semiconductor Corp. v. LSI Corp.*, Case No.  
8 12-cv-03451-RMW, D.I. 323 at Page 20 (N.D. Cal. February 25, 2014)(Final Jury  
9 Instructions); *Realtek Semiconductor Corp. v. LSI Corp.*, Case No. 12-cv-03451-RMW, D.I.  
10 324 at Page 2 (N.D. Cal. February 26, 2014)(Jury Verdict Form).

11 75. Funai and Realtek were Respondents in the United States International Trade  
12 Commission Investigation (In the Matter of Certain Audiovisual Components And Products  
13 Containing The Same, Investigation No. 337-TA-837), which this Court cited as the basis for  
14 finding Defendants had breached their contractual obligations to Realtek.

15 76. Realtek supplies the vast majority of the accused WiFi semiconductor chips  
16 that are accused by Defendants of practicing the WLAN standards.

17 77. Realtek and Defendants entered into a settlement and license agreement on July  
18 27, 2015 covering the '958 and '867 patents. *Realtek Semiconductor Corp. v. LSI Corp.*, Case  
19 No. 12-cv-03451-RMW, D.I. 395 (N.D. Cal. July 28, 2015) (Joint Motion to Dismiss).

20 78. But for Defendants' breach of its contractual obligations to Realtek, which has  
21 already been adjudicated, Funai would not have had to defend itself in the United States  
22 District Court and in the International Trade Commission for all Funai products that  
23 incorporate Realtek WiFi chips, which is the vast majority of all Funai WiFi products accused  
24 of infringing the '958 and '867 patents.

25 79. Defendants have refused to license the '958 and '867 patents to Funai on FRAND  
26 terms, even after this Court determined what the proper FRAND rates were for Realtek's WiFi  
27 chips, which were accused of infringing the '958 and '867 patents in the ITC action and are  
28 incorporated into Funai's products.



**Funai's Reliance on ITU Commitments with Respect to Video Decoding Technologies and Harm to Funai Due to Defendants' Breach of Their Commitments**

80. Funai and other companies adopting the H.264 standard relied on Defendants' commitments to ensure that the royalties Defendants would seek would conform to the promises made by Defendants.

81. In reliance on the integrity of the SDO process and the commitments made by Defendants and others regarding video decoding patents they deem "essential," Funai invested substantial resources and developed, marketed and sold its products which are compatible with the H.264 standard. Funai made its decision to develop and sell products compatible with the H.264 standard in reliance on, and under the assumption that, it and/or any third party supplier could avoid patent litigation and take a license to any patents that Defendants, or any other company, has disclosed to the H.264 standard under the ITU's well publicized IPR policy.

82. Funai and other manufacturers of H.264-compliant products necessarily relied on the commitments of Defendants and others to disclose and license any identified patents under these terms to avoid any patent controversy even if such patents are not necessary to compliant implementations or actually practiced in any particular implementation.

83. After extensive involvement in the ITU's design of the H.264 standard, Defendants willfully disregarded the commitments their predecessor company, VideoLocus, made to ITU and its members, affiliates and adopters, by refusing to extend to Funai a license consistent with Defendants' promises for their patents that they identified as "essential" to the H.264 standard, including the '663 patent.

84. On information and belief, after LSI's purchase of VideoLocus and its "essential" H.264 patents, including the '663 patent, LSI manipulated its licensing obligations under these patents. After LSI's purchase, it would only license its "essential" H.264 patents if it received royalties based on the sales price of the end consumer product in which those components are contained – a price frequently hundreds of times greater than the component price.

85. Because of, among other reasons, Defendants' policy of attempting to capture the value of the end consumer product, rather than the value of the component that provides H.264

1 functionality, Defendants have offered to license their allegedly “essential” patents to Funai  
2 under only unreasonable and discriminatorily exorbitant terms. Defendants have thus  
3 unreasonably and discriminatorily targeted Funai’s products for the purpose of extracting  
4 unreasonable royalties from Funai.

5 86. Defendants have refused to license the ‘663 patent to Funai unless Funai also takes  
6 a license to many of Defendants’ other patents as well, including patents that are irrelevant to  
7 Funai’s products, or are invalid.

8 87. Defendants have thereby refused to offer to license their allegedly “essential”  
9 patents at a reasonable rate, with reasonable terms, under conditions that are demonstrably free of  
10 any unfair discrimination, resulting in harm to Funai.

11 88. Instead of offering the ‘663 patent to Funai on FRAND terms, Defendants filed  
12 the aforementioned ITC action and the District Court Actions.

13 89. Requiring Funai to defend the ITC action and the District Court Actions without  
14 first having been offered a license to the ‘663 patent on FRAND terms, despite Defendants’  
15 promises to the contrary, is unjust. Defendants’ continued refusal to offer a license to the ‘663  
16 patent on FRAND terms perpetuates injustice.

17 90. Defendants’ breach of their commitments does not depend on whether any  
18 patents which Defendants have identified in relation to standards are, in fact, “essential” to  
19 practicing those standards, whether those standards can be practiced in ways that do not  
20 infringe the identified patents or whether Funai has infringed any valid Defendant patents.  
21 Because Defendants promised to license any such patents on reasonable and non-  
22 discriminatory terms, companies that rely on those commitments are entitled to avoid  
23 becoming embroiled in patent controversies and to receive the benefit of an offer of a  
24 reasonable and non-discriminatory license.

25 **Funai’s Reliance on Commitments to MPEG LA and Harm to Funai Due to Defendants’**  
26 **Breach of Their Commitments**

27 91. Plaintiff Funai Electric is a licensee of the MPEG LA AVC/H.264 technology.  
28 In agreeing to a license, Funai Electric relied on the declarations of MPEG LA licensors and

licensees that they would make available their H.264 standard-essential patents at the same per-patent rate that other licensors receive for their allegedly essential patents.

92. In willful disregard of the commitments they made to MPEG LA, its licensees and its licensors, Defendants have only offered to license their patents at a rate inconsistent with their obligations under the MPEG LA license, resulting in harm to Funai.

93. Instead of offering the '663 patent to Funai on FRAND terms, Defendants filed the aforementioned ITC action and the District Court Actions.

94. Requiring Funai to defend the ITC action and the District Court Actions without first having been offered a license to the '663 patent at the same per-patent rate that other MPEG-LA licensors receive for their allegedly essential patents, despite Defendants' promises to the contrary, is unjust. Defendants' continued refusal to offer a license to the '663 patent on these terms perpetuates injustice.

95. Defendants' breach of their commitments does not depend on whether any patents which Defendants have identified in relation to standards are, in fact, "essential" to practicing those standards, whether those standards can be practiced in ways that do not infringe the identified patents or whether Funai has infringed any valid Defendant patents. Because Defendants promised to license any such patents on reasonable and non-discriminatory terms, companies that rely on those commitments are entitled to avoid becoming embroiled in patent controversies and to receive the benefit of an offer of a reasonable and non-discriminatory license.

#### **The District Court Action**

96. On March 12, 2012, Defendants' LSI and Agere filed a complaint against Plaintiffs in the United States District Court for the Central District of California—Case No. 12-cv-02047—alleging infringement of the '867, '958, and '663 patents and one additional patent—the '087 patent. A true and correct copy of LSI's and Agere's original complaint is attached hereto as Exhibit 4. The complaint sought injunctive relief for Plaintiffs' alleged infringement of the '867, '958, and '663 patents.

1           97. Defendants have thereby sought injunctive relief prior to providing an offer to  
2 license the allegedly “essential” ‘867, ‘958 and ‘663 patents in a fair, reasonable and non-  
3 discriminatory manner. Defendants’ actions constitute a breach of their FRAND commitments.

4           98. On June 2, 2015 Avago was added as a plaintiff in the first amended complaint.  
5 In the first amended complaint and subsequent amended complaints LSI, Agere, and Avago  
6 did not seek injunctive relief with regard to the Plaintiffs’ alleged infringement of the ‘867,  
7 ‘958, and ‘663 patents.

8           99. On September 21, 2015 the district court case was transferred to the United  
9 States District Court for the Northern District of California—Case No. 15-cv-04307 before  
10 Judge Edward M. Chen.

11           100. After nearly four years of litigation, on February 4, 2016, LSI, Agere, and  
12 Avago voluntarily dismissed the district court case against Plaintiffs. To date, LSI, Agere,  
13 and Avago have not provided any justification for their voluntary dismissal of the District  
14 Court Actions and still have not offered to license the allegedly “essential” ‘867, ‘958 and ‘663  
15 patents in a fair, reasonable and non-discriminatory manner.

16                           **The International Trade Commission Investigation**

17           101. On March 12, 2012, Defendants LSI and Agere filed a complaint at the United  
18 States International Trade Commission (“ITC”) against Funai, alleging infringement of, inter alia,  
19 the ‘867, ‘958, and ‘663 patents, and seeking to exclude from entry into the United States Funai’s  
20 audiovisual products that were compliant with the 802.11 and H.264 standards. A true and  
21 correct copy of LSI and Agere’s complaint is attached hereto as Exhibit 5. The ITC instituted an  
22 investigation based on that complaint on April 11, 2012. USITC Inv. No. 337-TA-837, *Certain*  
23 *Audiovisual Components and Products Containing the Same*.

24           102. Defendants have thereby sought injunctive relief prior to providing an offer to  
25 license the allegedly “essential” ‘867, ‘958 and ‘663 patents in a fair, reasonable and non-  
26 discriminatory manner. Defendants’ actions constitute a breach of their FRAND commitments.

27           103. Defendants have represented that they possess patents “essential” to  
28 implementations of the 802.11 and H.264 standards. On that basis, Defendants are required to

1 tender an offer to license their “essential” patents in all respects consistent with their binding  
2 assurances to the IEEE and ITU, and their members, affiliates and adopters. Defendants’ filing  
3 of the District Court action and ITC complaint prior to offering FRAND rates constitutes a breach  
4 of their FRAND commitments.

5 104. Funai relied on Defendants’ FRAND commitments and, in that reliance,  
6 reasonably expected to not have to defend against injunctive relief without first having been  
7 offered licenses on FRAND terms to the allegedly essential patents. Funai suffered significant  
8 damages in reliance on Defendants’ FRAND commitments and because of Defendants’ unjust  
9 course of action.

10 105. After a seven-day hearing in April 2013, ALJ David Shaw of the ITC issued a  
11 final determination concerning the ‘867 and ‘958 patents on July 18, 2013. The ALJ determined  
12 that Funai did not directly infringe, induce infringement, or contributorily infringe any asserted  
13 claim of the ‘867, ‘958 and ‘663 patents.

14 106. On January 6, 2014, Funai and Defendants executed a license agreement for the  
15 ‘663 and ‘087 patents. Pursuant to the license agreement, Funai was licensed to practice the ‘663  
16 and ‘087 patents until September 30, 2015, and the parties stipulated to the dismissal of  
17 Defendants’ claims for relief on the ‘663 and ‘087 patents with prejudice. On February 3, 2014,  
18 this Court ordered that “[a]ll claims relating to U.S. Patent Nos. 5,870,087 and 6,982,663 are  
19 hereby dismissed with prejudice.”

20 107. After reviewing ALJ Shaw’s determination, on March 3, 2014 the full ITC  
21 affirmed the ALJ’s finding of non-infringement for the ‘958 patent, and further found that the  
22 claims of the ‘958 patent were invalid. The Commission also allowed to stand the ALJ’s  
23 determination of non-infringement of the ‘867 patent.

#### 24 **Defendants’ Monopoly Power in the Relevant Markets**

25 108. The relevant markets in which to assess the anticompetitive effects of Defendants’  
26 conduct are the various markets for technologies that—before the 802.11 and H.264 standards  
27 were implemented—were competing to perform each of the various functions covered by each of  
28 Defendants’ purported essential patents for the 802.11 and H.264 standards (collectively, the

1 relevant “Input Technologies Markets”). Therefore, the functionality for the 802.11 standard  
2 comprises its own relevant market for antitrust purposes and the functionality for the H.264  
3 standard comprises its own relevant market for antitrust purposes.

4 109. Prior to the adoption of the 802.11 and H.264 standards, alternative technologies  
5 existed. Had Defendants disclosed their unwillingness to abide by their FRAND obligations with  
6 respect to the ‘867 patent, ‘958 patent, and ‘663 patent IEEE and ITU would have decided to  
7 standardize an alternative technology to perform the relevant functions. Alternatively, IEEE and  
8 ITU would have continued to leave those relevant functions out of each standard, in which case  
9 implementers would have been free to choose various alternative technologies to perform those  
10 functions and IEEE and ITU would have been free to continue to evaluate competing alternative  
11 technologies for potential standardization in future iterations of those standards. In either case,  
12 but for Defendants’ misrepresentations and non-disclosure of their true intentions regarding the  
13 ‘867 patent, ‘958 patent, and ‘663 patent, alternative viable technologies would not have been  
14 excluded from the relevant Input Technology Market.

15 110. For the ‘867 patent, ‘958 patent, and ‘663 patent, IEEE and ITU had multiple  
16 viable alternatives to standardizing the technology Defendants now claims are covered by their  
17 patents. The technology identified in the ‘867 patent, ‘958 patent, and ‘663 patent and their  
18 reasonable substitutes comprise Input Technology Market. Before standardization, the sellers in  
19 these Input Technologies Markets were the companies supplying technologies capable of  
20 performing the relevant function incorporated in the standard. After standardization, however,  
21 the holder of patents covering the technology that performs a given function holds a monopoly in  
22 the relevant Input Technology Market. That is because, post-standardization, formerly viable  
23 alternative technologies are no longer viable because of the lock-in effect.

24 111. This lock-in effect exists, because once IEEE and ITU participants selected a  
25 single technology to perform a particular function needed to practice the standard, any alternative  
26 technologies that had been capable of performing that function were no longer viable alternatives  
27 for Funai and other parties seeking to implement the 802.11 and H.264 standards. Thus, the  
28 selection of a particular technology during the standard-setting process reduced to a single option

1 the technology to perform each function that IEEE and ITU determined to include in the standard.  
2 Parties implementing the standard such as Funai are thus “locked-in” to the technology. If a  
3 technology selected for inclusion in the standard is protected by patents, the patent owner controls  
4 the supply of that particular technological input for the standard. This is true for each function  
5 comprising the standard for which patented technology was selected.

6 112. The 802.11 and H.264 standards are employed throughout the world and  
7 alternative technologies competing to be incorporated into the 802.11 and H.264 standards were  
8 offered by suppliers from around the world. Accordingly, the geographic scope of each of the  
9 relevant Input Technologies Markets described above is worldwide.

#### 10 **Defendants’ Monopoly Power**

11 113. Defendants have obtained and maintained the power to raise prices in the relevant  
12 Input Technologies Markets, and thus enjoy monopoly positions in the relevant markets. Because  
13 Defendants have patents covering technologies that have been incorporated into the relevant  
14 standard, they have the power to raise prices and exclude competition with respect to each of the  
15 technologies covered by their patents and incorporated in the relevant standards. Defendants  
16 acquired that power as a result of their misconduct in connection with the standard-setting  
17 process, including their false FRAND commitments, and they continue to abuse that power by  
18 failing to live-up to their FRAND commitments. Barriers to entry into these markets are high  
19 because, among other reasons, the post-standardization lock-in effect means that other  
20 technologies are no longer viable substitutes for the technologies the standard specifies to perform  
21 functions included in the standard.

22 114. Defendants hold monopoly power in the Input Technology Markets assuming that  
23 the ‘867 patent, ‘958 patent, and ‘663 patent that Defendants assert are—as they claim—essential to  
24 the 802.11 and H.264 standards, valid and enforceable. In the alternative, even if one or more of  
25 patents that Defendants have asserted in this case were ultimately determined not to be essential  
26 to the 802.11 and H.264 standards (or were determined to be invalid or unenforceable),  
27 Defendants would still hold a monopoly position in the Input Technology Market associated with  
28 each such patent until such a determination were established conclusively. Merely by asserting



1 the '867 patent, '958 patent, and '663 patent are essential, Defendants are able to extract royalties  
2 or other licensing terms for each patent greatly exceeding what it could have obtained before  
3 IEEE and ITU standardized the technology they claim is covered by their patents. Defendants  
4 enjoy that hold-up power because, absent a license, a 802.11 and H.264 standards implementer  
5 must risk possible injunction against the sale of products implementing the 802.11 and H.264  
6 standards, potential treble damages in an infringement action, and/or prosecute a lengthy and  
7 expensive legal challenge to the validity, enforceability or essentiality of the '867 patent, '958  
8 patent, and '663 patent. Moreover, that hold-up power is enhanced where Defendants hold and  
9 have asserted multiple declared essential patents, as they did in this instance by seeking to extract  
10 exorbitant royalties for their entire portfolio of patents. By the assertion of multiple patents, the  
11 likelihood that some or even many may prove actually not to be essential (or to be invalid or  
12 unenforceable), does not prevent Defendants from extracting monopoly royalties or other license  
13 terms.

#### 14 **Defendants' Anticompetitive Conduct**

15 115. Defendants have submitted declarations to IEEE and ITU committing to  
16 irrevocably license the '867 patent, '958 patent, and '663 patent on FRAND terms. Defendants'  
17 failure to inform IEEE and ITU that, contrary to their declarations, they in fact would not meet  
18 their commitments was intentional and made with deceptive intent in order to induce IEEE and  
19 ITU to include in the 802.11 and H.264 standard technologies that Defendants claim are covered  
20 by the '867 patent, '958 patent, and '663 patent. Defendants' objective during the IEEE's and  
21 ITU's consideration of the relevant input technologies was first to cause those technologies to be  
22 standardized through their advocacy for their adoption and simultaneous deceit, and then to take  
23 advantage of the lock-in effect by demanding exorbitant royalties or other license terms that were  
24 unfair, unreasonable, and/or discriminatory, which objective was flatly inconsistent with their  
25 prior explicit FRAND undertaking to the IEEE and ITU.

26 116. Combined with their advocacy for adoption of the subject technologies,  
27 Defendants concealment of their true intention not to offer FRAND terms to all those  
28 implementing the standard—despite their prior written commitment to the contrary—induced



1 IEEE and ITU to standardize each of the technologies that Defendants claim are covered by the  
2 '867 patent, '958 patent, and '663 patent. Had Defendants disclosed their true intention not to  
3 offer FRAND license terms for the '867 patent, '958 patent, and '663 patent, IEEE and ITU  
4 would not have standardized the input technologies that Defendants now claim to be covered by  
5 the '867 patent, '958 patent, and '663 patent. Rather, IEEE and ITU would have decided either to  
6 standardize an alternative technology to perform the relevant function or continued to leave the  
7 relevant function out of the standard, in which case implementers would have been free to choose  
8 various alternative technologies to perform that function and IEEE and ITU would have been free  
9 to continue to evaluate competing alternative technologies for potential standardization in future  
10 iterations of the standard.

11 117. Alternative technologies could have been selected by the IEEE and ITU as the  
12 802.11 and H.264 standards but for Defendants' misrepresentations regarding their FRAND  
13 commitments. For example, with regards to the technology allegedly covered by the '958 patent  
14 alternative technologies for the 802.11 standard were considered by the IEEE based on individual  
15 proposals by Harris Corporation, Lucent Technologies, Inc., Micrilor, Inc., Alantro  
16 Communications, Inc., and The Raytheon Company before the IEEE approved a Harris  
17 Corporation and Lucent Technologies, Inc. joint proposal that became a portion of the 802.11  
18 standard. With regards, to the technology allegedly covered by the '867 patent, the IEEE could  
19 have elected to include alternative technologies that accomplish the same functionality as the '867  
20 patent. Likewise, Defendants' have admitted that alternative technologies for the H.264 standard  
21 could have been used in lieu of the technology allegedly covered by the '663 patent. Therefore,  
22 one or more alternative technologies could have been used in the 802.11 and H.264 standards  
23 instead of the technology allegedly covered by the '867 patent, '958 patent, and '663 patent  
24 without any material impact to the overall functionality of the 802.11 and H.264 standards.

25 118. Because, during the standardization process relevant to each of the input  
26 technologies that Defendants now claim to be covered by the '867 patent, '958 patent, and '663  
27 patent, Defendants intentionally concealed that they would not abide by their written FRAND  
28 declarations and in fact intended not to offer FRAND terms, IEEE and ITU and their members

1 relied on those FRAND declarations and Defendants' continuing obligations thereunder in  
2 entertaining Defendants' technology proposals and in entertaining Defendants' aggressive  
3 promotion of their proposals for standardization and ultimately agreeing to standardize the  
4 technologies that Defendants claim are covered by their patents.

5 119. Defendants' FRAND declarations falsely represented that Defendants would  
6 license their claimed essential patents on FRAND terms. Defendants' FRAND declarations  
7 covering the '867 patent, '958 patent, and '663 patent failed to disclose that Defendants would  
8 take the position that parties practicing the relevant standard were not licensed or entitled to a  
9 FRAND license to their claimed essential patents, refuse to offer FRAND license terms to certain  
10 parties, or attempt to prevent parties from practicing the relevant standard by filing lawsuits (like  
11 the ITC and District Court Actions), which seek to enjoin parties (like Funai) from practicing the  
12 relevant standard.

13 120. Once the IEEE and ITU participants selected technologies that Defendants claim  
14 are covered by the '867 patent, '958 patent, and '663 patent, they effectively lost the option to  
15 instead include or use alternative technologies capable of performing those functions, thereby  
16 excluding such technologies from the relevant Input Technologies Markets, or to continue to  
17 leave the relevant function out of the standard, in which case implementers would have been free  
18 to choose various alternative technologies to perform that function and continue to evaluate  
19 competing alternative technologies for potential standardization in future iterations of the  
20 standard. Accordingly, to the extent that Defendants' '867 patent, '958 patent, and '663 patent  
21 are essential to any standard, it was Defendants' false FRAND declarations—not the inherent  
22 attributes of their purportedly essential technologies or the uncorrupted operation of the standard-  
23 setting process—that conferred monopoly power on Defendants with respect to the technologies  
24 that perform the functions included in the standard.

25 121. Defendants' FRAND declarations are binding contractual commitments made to  
26 IEEE and ITU, its members and designers and sellers of products implementing IEEE and ITU  
27 standards (including Funai), for the benefit of IEEE and ITU, its members, and any entity that  
28 implements the 802.11 and H.264 standards (or any other IEEE and ITU standard for which

1 Defendants RAND commitments). Defendants therefore bound themselves to license on FRAND  
2 terms to Funai, a third party beneficiary of the FRAND obligations who is a seller of products  
3 that implement the 802.11 and H.264 standards.

4 122. Funai, members of IEEE, members of ITU, and other companies implementing the  
5 802.11 and H.264 standards have reasonably relied on Defendants' RAND commitments to: (a)  
6 grant licenses to those patents and patent applications that Defendants claim are essential on fair,  
7 reasonable, and non-discriminatory terms; and (b) not to seek to impose unfair, unreasonable, or  
8 discriminatory conditions on licensing, such as cross-licenses of patents covering proprietary  
9 technology that is not essential to any standard. In particular, Funai and others have relied on  
10 Defendants' commitments that preclude Defendants from seeking to enjoin them from practicing  
11 the 802.11 and H.264 standards (given that they are licensed as a resulting of Defendants'  
12 FRAND commitments), and that require Defendants to provide fair, reasonable, and non-  
13 discriminatory royalties and other license terms that would permit efficient competitors such as  
14 Funai profitably to offer standards-compliant products.

15 123. As part of their overall monopolistic scheme and in an attempt to effectuate the  
16 hold-up power that Defendants enjoy as a result of their concealment of their true intention not to  
17 offer FRAND terms to all those implementing the standards—despite their prior written  
18 commitment to the contrary—Defendants filed the ITC action and the District Court Actions.  
19 Without the threat of such litigation, Defendants' attempt to exercise their hold-up power would  
20 be futile.

## 21 CLAIMS FOR RELIEF

### 22 COUNT I

23 (Violation of Section 2 of the Sherman Act)

24 124. Funai realleges and incorporates by reference each of the foregoing paragraphs.

25 125. Defendants have unlawfully monopolized each of the relevant Input Technologies  
26 Markets by deliberately and deceptively failing to timely disclose—before standardization—their  
27 unwillingness to abide by their FRAND obligations with respect to the '867 patent, '958 patent,  
28 and '663 patent and by making false commitments to license the '867 patent, '958 patent, and

1 '663 patent on FRAND terms, and by reneging on their FRAND commitments. Defendants have  
2 undertaken this cumulative course of misconduct with the intent to monopolize the relevant Input  
3 Technologies Markets.

4 126. Had Defendants properly disclosed their unwillingness to abide by their FRAND  
5 obligations in a timely manner and had Defendants disclosed their true intent to assert that parties  
6 implementing the standards were not licensed and should be enjoined from selling the 802.11  
7 compliant products and H.264 compliant products or required to pay exorbitant license fees and  
8 accept other non-FRAND terms, IEEE and ITU would have decided to standardize an alternative  
9 technology to perform the relevant function. Alternatively, IEEE and ITU would have continued  
10 to leave the relevant function out of the standard, in which case implementers would have been  
11 free to choose various alternative technologies to perform that function and IEEE and ITU would  
12 have been free to continue to evaluate competing alternative technologies for potential  
13 standardization in future iterations of the standard. Defendants thus would not have obtained and,  
14 would not be able to maintain, a monopoly in the relevant Input Technologies Markets.

15 127. Defendants' non-disclosure of their true intentions and false FRAND  
16 commitments proximately resulted in incorporation into the standard of technology over which  
17 Defendants claim patent rights. Defendants have therefore unlawfully excluded competing  
18 technologies from each of the relevant Input Technologies Markets and unlawfully acquired  
19 monopoly power in those markets, which they continue to maintain by refusing to live up to their  
20 FRAND obligations and seeking to enjoin parties from selling 802.11 and H.264 compliant  
21 products.

22 128. As a direct and proximate result of Defendants' monopolization, Funai has  
23 suffered injury to its business and property and is threatened by the imminent loss of profits, loss  
24 of customers and potential customers, and loss of goodwill and product image. Funai suffers  
25 anticompetitive injury as a purchaser in the Input Technologies Markets because reasonable  
26 substitutes have been excluded. Because Defendants have abused their wrongfully-obtained  
27 monopoly power, Funai has been forced to expend significant resources and incur substantial  
28

costs, including attorneys' fees and other expenses, in defending against both Defendants' baseless ITC action and the District Court Actions.

## COUNT II

(Unfair Competition under Cal. Bus. & Prof. Code § 17200)

129. Funai realleges and incorporates by reference each of the foregoing paragraphs.

130. By the acts alleged, Defendants have engaged in unfair competition within the meaning of Cal. Bus. & Prof. Code § 17200, et seq. both through conduct that also violates the antitrust laws and conduct that violates § 17200 for other reasons.

131. Defendants conduct, as set forth herein, constitutes: (a) unlawful business acts or practices in violation of the federal antitrust laws, (b) fraudulent conduct and (c) unfair business acts or practices, including but not limited to unfair business practices threatening an incipient violation of an antitrust law, violating the policy or spirit of the antitrust laws and otherwise significantly threatening and harming competition in California and elsewhere.

132. Defendants committed unlawful business acts or practices by violating Section 2 of the Sherman Act and Section 5 of the Federal Trade Commission Act.

133. Defendants engaged in fraudulent conduct by engaging in fraudulent nondisclosures with respect to its claimed essential IPR and FRAND commitments.

134. Defendants committed unfair business acts or practices by (i) failing to disclose that they did not intend to meet their FRAND commitments; and (ii) suing Funai for patent infringement and an injunction despite knowing that Funai has the right to a FRAND license to the '867 patent, '958 patent, and '663 patent by virtue of Defendants' FRAND commitments.

135. As a direct, proximate, and foreseeable result of Defendants' wrongful conduct, as alleged above, competition has been injured in the Input Technologies Markets. Defendants' wrongful conduct also brings a significant threat of injury for downstream price, quality, and innovation competition for devices that connect wirelessly to the Internet, or third party products that decompress digital video streams, thereby causing injury to consumers in California and elsewhere. These threatened injuries include the inevitable passing on to consumers of improper royalties demanded by Defendants and decreases in innovation and quality competition for end

1 products that comply with the 802.11 and H.264 standards. Among other things, Defendants'  
2 abusive conduct threatens to dampen innovation for products that comply with the 802.11 and  
3 H.264 standards by eliminating manufacturers' ability to invest in and bring to market innovative  
4 products with confidence that holders of claimed essential patents will not seek to enjoin their  
5 products or demand exorbitant, non-FRAND licensing terms.

6 136. As a direct, proximate, and foreseeable result of Defendants' wrongful conduct, as  
7 alleged above, Funai has suffered harm in California and elsewhere, both as a customer in the  
8 Input Technology Markets and as a supplier of downstream products. This harm includes, among  
9 other things: Defendants suing and seeking injunctions against Funai; the unavailability of  
10 FRAND licenses despite Defendants' assurances that it would offer such FRAND licenses; being  
11 forced to expend resources to defend the ITC Action and the District Court Actions, and has  
12 suffered or faces the threat of, in particular, increased costs, lower quality or innovation for Input  
13 Technologies, loss of profits, loss of customers and potential customers, loss of goodwill and  
14 product image, uncertainty in business planning, and uncertainty among customers and potential  
15 customers.

### 16 COUNT III

#### 17 (Breach of Contract Based on IEEE FRAND Obligations)

18 137. Funai realleges and incorporates by reference each of the foregoing paragraphs.

19 138. Defendants entered into express or implied contractual commitments with IEEE-  
20 SA and its members, affiliates and adopters relating to the WLAN standard.

21 139. Each third party that would potentially implement the WLAN technology was an  
22 intended beneficiary of these contracts.

23 140. Defendants were contractually obligated, among other things, to offer a license to  
24 their identified patents consistent with the applicable patent policy of the IEEE-SA Standards  
25 Board Bylaws.

26 141. Defendants breached their contractual obligations by filing and maintaining the  
27 District Court action and ITC complaint seeking to enjoin Funai's implementation of the  
28 technology of the allegedly "essential" '958 and '867 patents, and to exclude Funai from, among

1 other things, importing, selling for importation, selling after importation and selling products that  
2 incorporate such technology, prior to offering Funai licenses to the '958 and '867 patents, under  
3 reasonable rates, with reasonable terms, and on a non-discriminatory basis.

4 142. As a direct and necessary result of Defendants' contractual breaches, Funai has  
5 been injured in its business or property, has been forced to expend substantial resources defending  
6 the ITC Action and the District Court Actions and is threatened by an imminent loss of profits,  
7 loss of customers and potential customers, and loss of goodwill and product image. Alternatively,  
8 Funai has been injured in its business or property, has been forced to expend substantial resources  
9 defending the ITC Action and the District Court Actions and is threatened by an imminent loss of  
10 profits, loss of customers and potential customers, and loss of goodwill and product image in a  
11 manner that was actually foreseen, or was reasonably foreseeable, by Defendants at the time  
12 Defendants' contractual commitments with the IEEE-SA were formed.

13 143. Funai will suffer irreparable injury by reason of the acts, practices, and conduct of  
14 Defendants alleged above unless and until the Court enjoins such acts, practices and conduct.

15 144. Among other things, Funai is entitled to damages and an injunction prohibiting  
16 Defendants from enforcing their allegedly "essential" patents against Funai, including the '958  
17 and '867 patents, or from excluding Funai from implementing the technology allegedly embodied  
18 in those patents.

#### 19 COUNT IV

##### 20 (Breach of Contract Based on ITU FRAND Obligations)

21 145. Funai realleges and incorporates by reference each of the foregoing paragraphs.

22 146. Defendants entered into express or implied contractual commitments with ITU  
23 and its members, affiliates and adopters relating to the H.264 standard.

24 147. Each third party that would potentially implement the H.264 technology was an  
25 intended beneficiary of these contracts.

26 148. Defendants were contractually obligated, among other things, to offer a license to  
27 their identified patents consistent with the applicable patent policy of the ITU.  
28





1 Defendants covenanted that they would offer licenses to the '663 patent at the same per patent  
2 rate that other licensors receive for their alleged H.264 essential patents.

3 155. Defendants breached their contractual obligations by filing and maintaining the  
4 District Court action and ITC complaint seeking to enjoin Funai's implementation of the  
5 technology of the '663 patent, and to exclude Funai from, among other things, importing, selling  
6 for importation, selling after importation and selling products that incorporate such technology,  
7 prior to offering Funai licenses to the '663 patent at a rate consistent with their obligations to  
8 MPEG LA..

9 156. As a direct and necessary result of Defendants' contractual breaches, Funai has  
10 been injured in its business or property, has been forced to expend substantial resources defending  
11 the ITC Action and the District Court Actions and is threatened by an imminent loss of profits,  
12 loss of customers and potential customers, and loss of goodwill and product image. Alternatively,  
13 Funai has been injured in its business or property, has been forced to expend substantial resources  
14 defending the ITC Action and the District Court Actions and is threatened by an imminent loss of  
15 profits, loss of customers and potential customers, and loss of goodwill and product image in a  
16 manner that was actually foreseen, or was reasonably foreseeable, by Defendants at the time  
17 Defendants' contractual commitments with ITU were formed.

18 157. Funai will suffer irreparable injury by reason of the acts, practices, and conduct of  
19 Defendants alleged above unless and until the Court enjoins such acts, practices and conduct.

20 158. Among other things, Funai is entitled to damages and an injunction prohibiting  
21 Defendants from enforcing the '663 patent against Funai, or from excluding Funai from  
22 implementing the technology allegedly embodied in those patents.

## 23 COUNT VI

### 24 (Promissory Estoppel)

25 159. Funai realleges and incorporates by reference each of the foregoing paragraphs.

26 160. Defendants made clear and definite promises to potential licensees through their  
27 commitments to IEEE and ITU that they would license their "essential" patents on FRAND  
28 terms.

1           161. The intended purpose of Defendants' promises was to induce reliance. Defendants  
2 knew or should have reasonably expected that these promises would induce sellers of products  
3 that incorporate wireless Internet connectivity capabilities and allow for the compression of  
4 videos, like Funai, to develop products compliant with the 802.11 and H.264 standards.

5           162. Funai developed and marketed its products in reliance on Defendants' promises, as  
6 described above, including making its products compliant with the 802.11 and H.264 standards.

7           163. In further reliance on Defendants' promises, Funai expected to be able to develop  
8 and market standard-compliant products without having to defend against injunctive relief and  
9 without being potentially subject to exorbitant royalties unless Defendants' first offered Funai  
10 FRAND licenses to their allegedly essential patents.

11           164. Defendants are estopped from reneging on these promises to IEEE and ITU, its  
12 members, designers, and sellers of products implementing the 802.11 and H.264 standards, under  
13 the doctrine of promissory estoppel.

14           165. Funai has been harmed as a result of its reasonable reliance on Defendants'  
15 promises. Funai has been forced to expend resources defending the ITC Action and the District  
16 Court Actions, including to enjoin its products notwithstanding its right to a FRAND license to  
17 the '867 patent, '958 patent, and '663 patent by virtue of Defendants' FRAND commitments and  
18 Funai's acceptance thereof, and is threatened by the loss of profits, loss of customers and  
19 potential customers, loss of goodwill and product image, uncertainty in business planning, and  
20 uncertainty among customers and potential customers.

21           166. Defendants' reneging of their promises constitutes injustice, which continues to  
22 harm Funai. By ruling Defendants' allegedly standards-essential patents unenforceable and  
23 awarding Funai damages resulting from its reasonable reliance on Defendants' promises, the  
24 Court can avoid the injustice.

25           167. Funai invokes the Court's equitable powers to address this cause of action. Funai  
26 requests that the Court find that Defendants' standards-related misconduct recited herein renders  
27 unenforceable Defendants' purported standards-essential patents, including those allegedly  
28 essential to the 802.11 and H.264 standards.

COUNT VII

(Breach of Contract Based on Breach of IEEE FRAND Obligations to Realtek)

168. Funai realleges and incorporates by reference each of the foregoing paragraphs.

169. This Court already found that Defendants breached their contractual obligations to Realtek by failing to offer Realtek a license to the '958 and '867 patents on FRAND terms before suing for injunctive relief in a United States District Court and in the International Trade Commission. *Realtek Semiconductor Corp. v. LSI Corp.*, 946 F. Supp. 2d 998, 1008 (N.D. Cal. 2013).

170. A jury awarded Realtek \$3,825,000 for Defendants' breach of its contractual obligation to Realtek, which was equivalent to the reasonable attorneys' fees and costs Realtek incurred in defending itself against the lawsuit filed by Defendants in the United States International Trade Commission. *Realtek Semiconductor Corp. v. LSI Corp.*, Case No. 12-cv-03451-RMW, D.I. 323 at Page 20 (N.D. Cal. February 25, 2014)(Final Jury Instructions); *Realtek Semiconductor Corp. v. LSI Corp.*, Case No. 12-cv-03451-RMW, D.I. 324 at Page 2 (N.D. Cal. February 26, 2014)(Jury Verdict Form).

171. Funai and Realtek were Respondents in the United States International Trade Commission Investigation (In the Matter of Certain Audiovisual Components And Products Containing The Same, Investigation No. 337-TA-837), which this Court cited as the basis for finding Defendants had breached their contractual obligations to Realtek.

172. Realtek supplies the vast majority of the accused WiFi semiconductor chips that are accused by Defendants of practicing the WLAN standards.

173. But for Defendants breach of its contractual obligations to Realtek, which has already been adjudicated, Funai would not have had to defend itself in the United States District Court and in the International Trade Commission for all Funai products that incorporate Realtek WiFi chips, which is the vast majority of all Funai WiFi products accused of infringing the '958 and '867 patents.

174. As a result of Defendants' contractual breaches, Funai has been injured in its business or property and Funai is entitled to damages.

COUNT VIII

(Declaratory Judgment for Determination of FRAND Rate and that Defendants Must Offer Funai a FRAND License or That Defendants' Patents Are Unenforceable Against Funai)

175. Funai realleges and incorporates by reference each of the foregoing paragraphs.

176. Defendants expressly stated in their declarations to IEEE that they would license patents which they identified as essential to WLAN under reasonable rates and non-discriminatory terms.

177. Defendants expressly stated in their declarations to ITU-T that they would license patents which they identified as essential to H.264 under reasonable rates and non-discriminatory terms.

178. There is a dispute between the parties concerning whether Defendants have offered to license the '867, '958 and '663 patents to Funai under terms consistent with Defendants' declarations and the referenced policies of the IEEE-SA Standards Board and the ITU.

179. The dispute is of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

180. Funai is entitled to a declaratory judgment that Defendants have not offered license terms to the '867, '958 and '663 patents to Funai consistent with Defendants' declarations and the referenced policy of the IEEE-SA Standards Board and the ITU.

181. Because Defendants have refused to offer a license on FRAND terms to Funai, Funai is further entitled to a declaratory judgment setting forth the FRAND terms and conditions for a license consistent with Defendants' declarations and the referenced policy of the IEEE-SA Standards Board and the ITU, including the applicable royalty rate.

182. Funai is further entitled to a declaratory judgment that if Defendants refuse to offer a license on FRAND terms, the allegedly "essential" patents shall be unenforceable as to Funai and its customers, including the '958, '867 and '663 patents.

PRAYER FOR RELIEF

Wherefore, Funai prays for relief as follows:

1           A.     Adjudge and decree that Defendants have violated Sections 2 of the Sherman Act,  
2     15 U.S.C. § 2, and enjoin Defendants from further violations of that Law;

3           B.     Adjudge and decree that Defendants have violated the Cal. Bus. & Prof. Code §  
4     17200 and enjoin Defendants from further violations of that Law;

5           C.     Adjudge and decree that Defendants are liable for breach of contract;

6           D.     Decree that Funai is entitled to license any and all patents that fall within  
7     Defendants' commitments to the IEEE in relation to WLAN technology, including the '867 and  
8     '958 patents, on a fair, reasonable and non-discriminatory basis;

9           E.     Decree that Funai is entitled to license any and all patents that fall within  
10    Defendants' commitments to the ITU in relation to H.264 technology, including the '663 patent,  
11    on a fair, reasonable and non-discriminatory basis;

12          F.     Enjoin Defendants from further demanding royalties from Funai that are  
13    inconsistent with Defendants' FRAND obligations, and from enforcing, or seeking to enforce,  
14    patent infringement claims in breach of their FRAND obligations as alleged above;

15          G.     An accounting of what constitutes a royalty rate in all respects consistent with  
16    Defendants' promises for patents identified as "essential" to WLAN and H.264 by Defendants;

17          H.     Decree that Defendants' '867, '958 and '663 patents are unenforceable as to Funai  
18    and its customers;

19          I.     Pursuant to Section 4 of the Clayton Act, 15 U.S.C. § 15, enter judgment against  
20    Defendants for treble the amount of Funai's damages, enjoin Defendants from demanding from  
21    Funai non-FRAND terms for Defendants' purportedly essential patents, and award Funai all  
22    reasonable attorneys' fees and costs;

23          J.     Enter judgment against Defendants for the amount of damages that Funai proves at  
24    trial;

25          K.     Enter judgment awarding Funai its expenses, costs, and attorneys' fees in  
26    accordance with 28 U.S.C. § 1927 and/or Rule 54(d) of the Federal Rules of Civil Procedure;

27          L.     Decree that this is an exceptional case pursuant to 35 U.S.C. § 285 and awarding  
28    Funai its costs and reasonable attorneys' fees; and

1 M. Provide such other and further relief as the Court deems just and proper.  
2

3 Dated: March 11, 2016

BAKER & HOSTETLER LLP

4 By: /s/ Kevin W. Kirsch  
5 Kevin W. Kirsch

6 Attorneys for Plaintiffs  
7 FUNAI ELECTRIC CO., LTD.; FUNAI  
8 CORPORATION, INC.; P&F USA INC.; and  
9 FUNAI SERVICE CORP.  
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